92-060496/08 C06 D16 WAKU-18.10.89
WAKUNAGA SEIYAKU KK *J0 4004-879-A
05.03.90-JP-051779 (+JP-269118) *(09.01.92)* C12n-15/40

Filamentous virus gene - which is used f r culture f garlic species r sistant to mosaic virus and latent virus

C92-027309

Genes coding for envelope proteins from filamentous viruses having the amino acid sequences defined in the specification, or their precursors are new.

MORE SPECIFICALLY

The nucleotide sequences of the genes (8 sequences) are also given in the specification.

USE/ADVANTAGE

Culture of new garlic spp. resistant against garlic mosaic virus (GMV) and garlic latent virus (GLV), and investigation of viral diseases is possible.

PREPARATION

The cloning of the genes is performed by:
(1) purification of virus from GMV-infected garlic leaves;
(2) prepn. of viral cDNA by fractionation of RNA followed by ligation of polyA; and

C(4-B4A1, 4-B4A5, 11-C8E, 12-A6, 12-K4) D(5-C12, 5-H6, 5-H12)

(3) introducti n into vector by transformation.

The process can also be performed chemically. The resultant gene is introduced into plants. (22ppW - 79CAFDwgNo 0/7)